

Translation

PATENT COOPERATION TREATY

PCT/EP2003/011216



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P26908/WO Kf	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/011216	International filing date (day/month/year) 09 October 2003 (09.10.2003)	Priority date (day/month/year) 11 October 2002 (11.10.2002)
International Patent Classification (IPC) or national classification and IPC F04B 49/00		
Applicant BRUENINGHAUS HYDROMATIK GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 11 February 2004 (11.02.2004)	Date of completion of this report 21 January 2005 (21.01.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/011216

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages _____ 1-15 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages _____ 1-9 _____, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the drawings:
pages _____ 1/4-4/4 _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims		YES
	Claims	1-9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following document:

D1: DE-A-199 53 170

1. The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 1 is not novel (PCT Article 33(2)).

Document D1 discloses the following (the references in parentheses are to D1):

a control device for a hydraulic pump (3) which operates in at least one working pipe (13), with a pump displacement that can be adjusted by an adjustment device (15); wherein the adjustment device (15) can be acted upon by an adjusting pressure which is controlled by a control valve (26) according to a first pressure and a second pressure, the first pressure being that which acts on a first measuring surface (89) via a first pressure line (38), and the second pressure being that which acts on a second measuring surface (91) on the opposite end of the control valve via a second pressure line (39), and the first pressure

being greater than the second pressure; with a pressure chamber (77) formed between the first and second measuring surfaces (89, 91), and with a leakage path leading from the pressure chamber (77) towards the second pressure line (39) (see D1, column 4, line 17 to column 8, line 66, and figures 1 and 2).

The subject matter of claim 1 therefore lacks novelty.

Although the "pressure chamber" shown in D1 differs significantly from the pressure chamber in the present invention, the annular recess 77 in the valve piston in the control device of D1 can also be regarded as a "pressure chamber". Since the annular recess 77 is also connected to the first pressure connection P via the connecting channel 58 (see D1, figure 1) and the first pressure is greater than the second pressure, a leakage path leading from this "pressure chamber" towards the second pressure line is formed by the gaps that are required between the sealing portions of the valve piston and the bore in the valve block (as described in the present application, page 1, line 33 to page 2, line 3).

2. The application also fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 6 is not novel (PCT Article 33(2)).

Document D1 discloses the following (the references in parentheses are to D1):

a valve block (50) for a control device with at least one recess (53) for receiving a valve piston (76) that has a first measuring surface (89) and a

second measuring surface (91) facing in the opposite direction; wherein the first measuring surface (89) can be acted upon by a first pressure and the second measuring surface (91) can be acted upon via a second pressure line (39) by a second pressure which is lower than the first pressure; wherein a sealing portion (78) is formed on the valve piston (76), with a pressure chamber (77) on the side facing away from the second measuring surface (91); wherein the sealing portion (78) forms a leakage path leading from the pressure chamber (77) into the second pressure line (39) (see D1, column 4, line 17 to column 8, line 66, and figures 1 and 2).

The subject matter of claim 6 therefore lacks novelty.

3. The subject matter of dependent claims 2 to 5 and 7 to 9 also lacks novelty in relation to D1. The connecting channel (58) in D1 can be considered a "counterpressure line", as in claim 2, or a "counterpressure channel", as in claim 7 (see D1, column 8, lines 9 to 12, and figures 1 and 3).
4. The application was also found to present the following problems of clarity:
 - (a) Under PCT Rule 11.13(m), a given feature must always be referred to using the same reference sign throughout the application. This requirement has not been met in the present application.
 - The "first pressure line" appears with reference signs 38 (claim 1) and 87 (claim 6).

- The "pressure chamber" appears with reference signs 45 (claims 1 and 2) and 101 (claims 6 to 9).

(b) Terminology and signs should be used consistently throughout the application (PCT Rule 10.2). This requirement has not been met in the present application.

- The terms "pressure chamber" (claims 1, 2 and 6 to 8) and "annular channel" (claim 9) are both used to refer to the same feature with the same reference sign (reference sign 10).
- Reference sign 87 is used with three different terms, namely "counterpressure line" (claim 2), "first pressure line" (claim 6) and "counterpressure channel" (claim 7).